

TSMC-03-268



January 22, 2004

To: Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/700,779 11/04/03 |

An-Chun Tu et al.

METHOD FOR IMPROVING INTERLEVEL  
DIELECTRIC GAP FILLING OVER SEMI-  
CONDUCTOR STRUCTURES HAVING HIGH  
ASPECT RATIOS

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on January 27, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date SB Ack 1/27/04

U.S. Patent 5,751,040 to Chen et al., "Self-Aligned Source/Drain Mask ROM Memory Cell Using Trench Etched Channel," describes a method for forming vertical FETs for ROM memory cells in which a source is formed in a trench, an FET channel is formed in the trench wall, and a drain on the surface which are self-aligned.

U.S. Patent 4,994,404 to Sheng et al., "Method for Forming a Lightly-Doped Drain (LDD) Structure in a Semiconductor Device," discusses using a disposable amorphous carbon sidewall spacer to self-align the source/drain contacts to the LDD.

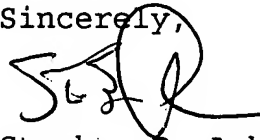
U.S. Patent 6,380,535 to Wetzel et al., "Optical Tuft for Flow Separation Detection," describes a method for making sidewall spacers on an FET gate electrode without damaging the substrate during etching.

U.S. Patent 6,455,373 to Pham et al., "Semiconductor Device Having Gate Edges Protected from Charge Gain/Loss," discusses making flash memory (floating gate) FETs in which the sidewalls are of different thicknesses on the source and drain sides to reduce leakage currents, such as ion charge and the like.

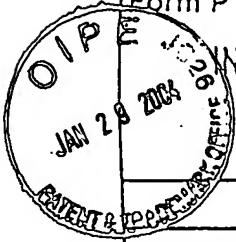
TSMC-03-268

U.S. Patent 6,365,943 to Gardner et al., "High Density Integrated Circuit," describes a method for making two levels of FET devices to increase circuit density on the chip.

Sincerely,

A handwritten signature in black ink, appearing to read 'SBA', written over a circular stamp or mark.

Stephen B. Ackerman,  
Reg. No. 37761



Form PTO-1449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Document Number (Optional)

TSMC-03-268

Application Number

10/700,779

Applicant

An-Chun Tu et al.

Filing Date

11/04/03

Group Art Unit

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILED DATE IF APPROPRIATE
	5751040	5/12/98	Chen et al.	257	332	9/16/96
	4994404	2/19/91	Sheng et al.	437	44	8/28/89
	6365943	4/2/02	Gardner et al.	257	377	9/21/98
	6380535	4/30/02	Wetzel et al.	250	227.14	8/6/99
	6455373	9/24/02	Pham et al.	438	257	4/12/01

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Portion of Pages, Etc.)


EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.